ATPAC UPDATE

AREA OF CONCERN 129-1

4/19/07
SAFETY: No

SUBJECT: Cancellation of Takeoff Clearance.

DISCUSSION: This AOC was submitted by ALPA after issues were expressed regarding the possible misunderstanding of controller initiated cancellations of takeoff clearances. The discussion highlighted the extreme jeopardy this procedure places the aircraft and crew in as it may be utilized inappropriately to preclude Operational Errors and/or Deviations, Traffic Management initiatives. Also discussed was a Boeing study that related that this activity is the most dangerous for the aircraft and crew of any aviation regime owing to the fact that the crew, in many cases, does not have sufficient time to analyze the information being given to determine the best course of action based on speed, weight, and other particular flight parameters. It was suggested that the .65, .3, and AIM be changed to include wording that would apply more stringent rules on controllers. Also stated was that the controller consider speed, weight, weather, etc in the determination to apply instructions for an abort. All agreed that to quantify these data would be impossible for the controllers and place an untenable liability on both controllers and flight crews that would not likely result in the desired outcome. Further discussion focused on the difficulty in addressing the culture of controller's desire to prevent/avoid OE/Ds and the possible conflict with the pilot's responsibility.

130 - ALPA submitted the recommendation below and it was approved by type committee.

SUGGESTED ATPAC ACTION: ALPA with assistance from Don Frenya/Kerry Rose will write a proposed MBI that would highlight the danger of these activities and apprise controllers of the appropriate circumstances in which it might be used.

RECOMMENDATION: The following MBI is proposed: PROPOSED MBI FOR TERMINAL CONTROLLERS REGARDING CANCELLATION OF TAKEOFF CLEARANCE

In the past year there were two reported events involving high performance aircraft that highlight the need for a review of the application of this procedure. In each recorded incident, the clearance was cancelled when the aircraft was accelerating rapidly, near the decision speed, and no reason was given. A high-speed abort was the result in each case and in one case, overheated brakes and tires caused the tires high pressure plugs to explode several minutes after the aircraft stopped. Additionally, a search of the NASA ASRS database revealed several events that highlighting the safety concerns that result from high speed aborts.
In one case the Cancel Takeoff Clearance instruction was issued because the pilot of another aircraft on an intersecting runway advised the tower that he could not hold short

of the intersection. The cancel takeoff instruction was issued to avoid a loss of procedural separation even though the aircraft would have been airborne well before the intersection. A second event involved an aircraft that failed to hold short of the runway at a down field taxiway. A third event included a takeoff cancellation that dealt with a weather alert.

High-speed abort procedures and the inherent risks are an integral part of the training programs for pilots of high performance aircraft. Because of the risk of departing the end of the runway and damage to the aircraft and passengers or cargo, a high-speed abort is one of the most dangerous events a pilot could encounter in a high performance aircraft. Even if the aircraft does not depart the runway, damage to aircraft can be significant and occasionally, catastrophic. Pilots are taught to closely evaluate "lower level" system malfunctions as speed increases during the takeoff roll because, unless a major problem occurs, it is proven that it is safer to takeoff than to execute a high speed abort.

Once incident following a high-speed abort event a few years ago resulted when an aircraft that was on takeoff roll at a high speed and the tower received an EDCT for that aircraft and the controller cancelled the takeoff clearance.

In light of these events, the paragraph and its application should be reviewed to determine if controller awareness of the safety implications of issuing a cancellation of a takeoff clearance should be enhanced. The overall guidance should be that a cancellation of a takeoff clearance should be issued after the start of the takeoff roll only if there is a substantial risk of collision. The considerations for issuance of the cancellation must be greater than traffic management initiatives such as MIT requirements and/or EDCT. We realize that a hard and fast rule cannot be written, that the safety of the procedure resides in the controller's judgment, and the decision to abort must reside in the cockpit. But it appears that some education would be helpful to expand on the guidance in FAA order 7110.65 and perhaps controller training.

131 - Not discussed.

132 - ATO does not want to issue an MBI. Briefing items were provided to controllers in the event of cancellation of takeoff clearance.

CURRENT STATUS: CLOSED

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